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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. **SHOJI KIKUCHI** 09/139,709 08/26/1998 1232-4465 5642 12/04/2003 EXAMINER **MORGAN & FINNEGAN** WALLERSON, MARK E 345 PARK AVENUE NEW YORK, NY 10154 ART UNIT PAPER NUMBER 2626

DATE MAILED: 12/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No. **09/139,709**

Applicant(s)

Kikuchi

Examiner

Mark Wallerson

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The MAILING DATE of this communication appears on the cover sheet with the correspondence address		
Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the		
mailing date of this communication. If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
Status		
1) 💢	Responsive to communication(s) filed on Aug 28, 2	
2a) 💢	This action is FINAL . 2b) ☐ This acti	ion is non-final.
3) 🗆	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11; 453 O.G. 213.	
Disposition of Claims		
4) 💢	Claim(s) 1, 2, 5, 7-14, 17-28, 30, and 32	is/are pending in the application.
4	a) Of the above, claim(s)	is/are withdrawn from consideration.
5) 🗆	Claim(s)	is/are allowed.
6) 💢	Claim(s) 1, 2, 5, 7-14, 17-28, 30, and 32	is/are rejected.
	Claim(s)	
		are subject to restriction and/or election requirement.
Application Papers		
9) The specification is objected to by the Examiner.		
10)	10)□ The drawing(s) filed on is/are a)□ accepted or b)□ objected to by the Examiner.	
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).	
11)	The proposed drawing correction filed on	is: a) \square approved b) \square disapproved by the Examiner.
	If approved, corrected drawings are required in reply to	o this Office action.
12) The oath or declaration is objected to by the Examiner.		
Priority under 35 U.S.C. §§ 119 and 120		
13) 📈 Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).		
a) 🗶	a) 💢 All b) 🗌 Some* c) 🗆 None of:	
1	1. X Certified copies of the priority documents have been received.	
2	2. \square Certified copies of the priority documents have been received in Application No	
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).		
*See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).		
a) The translation of the foreign language provisional application has been received. 15) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.		
Attachment(s)		
		4) Interview Summary (PTC-413) Paper No(s).
2) Not		5) Notice of Informal Patent Application (PTO-152)
3) [] Info	ormation Disclosure Statement(s) (PTO-1449) Paper No(s).	6)

Part III DETAILED ACTION

Notice to Applicant(s)

- 1. This action is responsive to the following communications: amendment filed on 8/28/2003.
- 2. This application has been reconsidered. Claims 1, 2, 5, 7-14, 17-28, 30 and 32 are pending.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1, 2, 5, 7-14, 17-28, 30 and 32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear to the Examiner how the print software can be terminated (line 11 of claim 1) when there is no indication that the print software is running or operational.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1, 2, 5, 24, 25, 26, 27, 28, 30, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko et. al. (hereinafter referred to as Kaneko) in view of Sakurai (U. S. 5,924,802) and Matsumoto et. al. (hereinafter referred to as Matsumoto) (U. S. 6,301,611).

With respect to claims 1, 2, 4, 5, 24, 25, 26, 27, 28, 30, and 32, Kaneko discloses a composite system (printer/scanner) including a first apparatus (which reads on Main Body of Device) (figure 3) having convertible options (101 and 102) to function as a printer (101) and a reader (102), and an information processing apparatus (11), a detection device (4) provided in the first apparatus for detecting the option (printer or scanner) installed on the first apparatus (column 4, lines 25-30).

Although Kaneko discloses that various parameters regarding the image recording and reading are inputted from the image processing apparatus (11) (column 4, lines 64-67), Kaneko differs from claims 1, 2, 5, 24, 25, 26, 27, 28, 30, and 32 in that he does not clearly disclose a signaling unit provided in the first apparatus, adapted to automatically transmit to the information processing apparatus an option signal indicative of the detected option when the option is

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changed; print and read software stored on the image processing apparatus, launching either the print or read software depending on the selected option detected by the detection device, and terminating the print software when the detection device detects a reader is installed.

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Sakurai discloses a printer and control method comprising a signaling unit (which reads on the controller) (5) provided in the first apparatus, adapted to automatically transmit to the information processing apparatus an option signal indicative of the detected option when the option is changed (figure 5; column 5, lines 28-43; column 6, lines 54-62; column 9, lines 56-58, and column 10, lines 1-5), wherein a host computer (100) stores algorithm or drivers (launching means) for a printer (column 5, lines 54-59) and an option device (scanner) (column 3, lines 36-41, column 6, lines 59-67, column 8, lines 44-67, and column 9, lines 14-34), launches either the print or scanner (option device) software depending on the selected option detected by the detection device (column 9, lines 14-34 and column 8, lines 48-62), and terminating the print software when the detection device detects a reader is installed (which reads on changing the printer driver in accordance with the identification information obtained from the optional device - wherein the optional device may be a scanner) (column 2, lines 11-15; column 3, lines 36-41); column 6, lines 64-67; column 8, line 63 to column 9, line 9, and column 10, lines 7-11).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko wherein a signaling unit is provided in the first apparatus is adapted to automatically transmit an option signal to the information processing apparatus indicative of the detected option when the option is changed and wherein print and read software

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is stored on the image processing apparatus and launched depending on the selected option detected by the detection device and the print software is terminated when the detection device detects a reader is installed. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko by the teaching of Sakurai so that changes of settings in the printer would not have to be performed as disclosed by Sakurai in column 8, lines 44-48. This enables printing and reading corresponding to a variety of option units.

Kaneko as modified also differs from claims 1, 2, 5, 24, 25, 26, 27, 28, 30, and 32 in that although he discloses sending the scanned image to the PC (column 5, lines 7-32), he does not clearly disclose allowing displaying of an image read by the reader (scanner) when the detection device detects that the reader is detected or installed, and that the software is application software.

Matsumoto discloses a communications apparatus having means for sending scan information to a host (column 3, lines 56-65), allowing displaying of an image read by the reader (scanner) when the detection device detects that the reader is detected or installed (column 16, lines 54-67 and column 17, lines 39-53), and means for executing scan or print application software based on a selected scan or print operation (column 12, lines 15-30 and column 16, lines 23-29). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko as modified to allow displaying of an image read by the reader (scanner) when the detection device detects that the reader is detected or installed and to execute the application software based on the selected operation. It would have been obvious to one of

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ordinary skill in the art at the time of the invention to have modified Kaneko as modified by the teaching of Matsumoto in order to improve operator control.

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With regard to claim 7, Kaneko discloses that the option is installed by mounting a print cartridge (101) or a reader cartridge (102) to a carriage of the first apparatus (column 1, lines 17-24 and column 3, lines 27-35).

With respect to claim 8, Kaneko discloses that the print cartridge is an ink-jet print cartridge (column 2, lines 58-62).

With regard to claim 9, Kaneko discloses that the reader cartridge uses LEDs as a light source (column 3, lines 36-52).

With respect to claim 10, Kaneko discloses that a color separation (by use of color filters) method for reading a color image is adopted for reading a color image by the read cartridge is frame sequential method for reading the color image by sequentially turning on each LED (column 3, lines 36-52, column 6, lines 55-63, and column 7, lines 8-20).

With regard to claims 11 and 12, Kaneko differs from claims 11 and 12 in that he does not clearly disclose that the first apparatus is a printer or scanner. However, Sakurai discloses that the first apparatus may be a printer (50) or a scanner (column 9, lines 10-13). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko wherein the first apparatus is a printer or scanner. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko by the

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teaching of Sakurai in order to be able to apply the optional device to a plurality of main devices as disclosed by Sakurai in column 9, lines 10-13.

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko in view 8. of Sakurai and Matsumoto as applied to claim 1 above, and further in view of Minamizawa (U. S. 6,065,074).

With respect to claim 13, Kaneko as modified differs from claim 13 in that he does not clearly disclose that the first apparatus has both a printer mechanism and a reader mechanism and the option is selected between the printer and reader mechanisms.

Minamizawa discloses a multi-functional peripheral device (1) connected to a computer (2), wherein the multi-functional peripheral device (1) comprises a printer (39) and a scanner (38), and a task is selected based on the user (column 2, line 50 to column 3, line 6). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko as modified wherein the first apparatus has both a printer mechanism and a reader mechanism and the option is selected between the printer and reader mechanisms. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified

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Kaneko as modified by the teaching of Minamizawa in order to be able to execute simultaneous functions as disclosed by Minamizawa in column 1, lines 19-21.

- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 10. Claims 14, 17, 18, 19, 20, 21, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko (U. S. 6,134,030) in view of Sakurai (U. S. 5,924,802) and Matsumoto (U. S. 6,301,611).

With respect to **claim 14**, Kaneko discloses an apparatus (printer/scanner) (figure 3) having convertible options (101 and 102) to function as a printer (101) and a reader (102), which realizes a composite system (which reads on Main Body of Device) (figure 3) in combination with an information processing apparatus (11), a detection device (4) for detecting the option (printer or scanner) installed on the first apparatus (column 4, lines 25-30), and output means (figure 4) for outputting a signal indicative of the installed option detected by the detection device (4) (column 5, lines 54-67).

Although Kaneko discloses that various parameters regarding the image recording and reading are inputted from the image processing apparatus (11) (column 4, lines 64-67), Kaneko

differs from claim 14 in that he does not clearly disclose a signaling unit provided in the first apparatus, adapted to automatically transmit to the information processing apparatus an option signal indicative of the detected option when the option is changed and that the print and read software are stored on the image processing apparatus, and terminating the print software when the detection device detects a reader is installed.

Sakurai discloses a printer and control method comprising a signaling unit (which reads on the controller) (5) provided in the first apparatus, adapted to automatically transmit to the information processing apparatus an option signal indicative of the detected option when the option is changed (figure 5; column 5, lines 28-43; column 6, lines 54-62; column 9, lines 56-58, and column 10, lines 1-5), wherein a host computer (100) stores algorithm or drivers (launching means) for a printer (column 5, lines 54-59) and an option device (scanner) (column 3, lines 36-41, column 6, lines 59-67, column 8, lines 44-67, and column 9, lines 14-34), and launches either the print or scanner (option device) software depending on the selected option detected by the detection device (column 9, lines 14-34 and column 8, lines 48-62), and terminating the print software when the detection device detects a reader is installed (which reads on changing the printer driver in accordance with the identification information obtained from the optional device wherein the optional device may be a scanner) (column 2, lines 11-15; column 3, lines 36-41); column 6, lines 64-67; column 8, line 63 to column 9, line 9, and column 10, lines 7-11). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko wherein print and read software is stored on the image

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processing apparatus. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko by the teaching of Sakurai so that changes of settings in the printer would not have to be performed as disclosed by Sakurai in column 8, lines 44-48. This enables printing and reading corresponding to a variety of option units.

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Kaneko as modified also differs from claim 14 in that although he discloses sending the scanned image to the PC (column 5, lines 7-32), he does not clearly disclose allowing displaying of an image read by the reader (scanner) when the detection device detects that the reader is detected or installed, and that the software is application software.

Matsumoto discloses a communications apparatus having means for sending scan information to a host (column 3, lines 56-65), allowing displaying of an image read by the reader (scanner) when the detection device detects that the reader is detected or installed (column 16, lines 54-67 and column 17, lines 39-53), and means for executing scan or print application software based on a selected scan or print operation (column 12, lines 15-30 and column 16, lines 23-29), and outputting a signal indicative of which software should be launched (which reads on executing scan or print control) (column 12, lines 15-25).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko as modified wherein a signaling unit is provided in the first apparatus is adapted to automatically transmit an option signal to the information processing apparatus indicative of the detected option when the option is changed and to allow displaying of an image read by the reader (scanner) when the detection device detects that the reader is

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detected or installed and to execute the application software based on the selected operation. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko as modified by the teaching of Matsumoto in order to improve operator control.

With regard to **claim 17**, Kaneko discloses that the option is installed by mounting a print cartridge (101) or a reader cartridge (102) to a carriage of the first apparatus (column 1, lines 17-24 and column 3, lines 27-35).

With respect to **claim 18**, Kaneko discloses that the print cartridge is an ink-jet print cartridge (column 2, lines 58-62).

With regard to **claim 19**, Kaneko discloses that the reader cartridge uses LEDs as a light source (column 3, lines 36-52).

With respect to **claim 20**, Kaneko discloses that a color separation (by use of color filters) method for reading a color image is adopted for reading a color image by the read cartridge is frame sequential method for reading the color image by sequentially turning on each LED (column 3, lines 36-52, column 6, lines 55-63, and column 7, lines 8-20).

With regard to claims 21 and 22, Kaneko differs from claims 21 and 22 in that he does not clearly disclose that the first apparatus is a printer or scanner. However, Sakurai discloses that the first apparatus may be a printer (50) or a scanner (column 9, lines 10-13). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko wherein the first apparatus is a printer or scanner. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko by the

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teaching of Sakurai in order to be able to apply the optional device to a plurality of main devices as disclosed by Sakurai in column 9, lines 10-13.

- 11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 12. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko in view of Sakurai and Matsumoto as applied to claim 14 above, and further in view of Minamizawa (U. S. 6,065,074).

With respect to claim 23, Kaneko as modified differs from claim 23 in that he does not clearly disclose that the first apparatus has both a printer mechanism and a reader mechanism and the option is selected between the printer and reader mechanisms.

Minamizawa discloses a multi-functional peripheral device (1) connected to a computer (2), wherein the multi-functional peripheral device (1) comprises a printer (39) and a scanner (38), and a task is selected based on the user (column 2, line 50 to column 3, line 6). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko as modified wherein the first apparatus has both a printer mechanism and a reader mechanism and the option is selected between the printer and reader mechanisms. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified

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Kaneko as modified by the teaching of Minamizawa in order to be able to execute simultaneous functions as disclosed by Minamizawa in column 1, lines 19-21.

Response to Arguments

13. Applicant's arguments filed 8/28/2003 have been fully considered but they are not persuasive.

Applicant submits that *Sakurai* does not disclose terminating the print software when the detection device detects that a reader is installed. The Examiner disagrees. *Sakurai* discloses that the option device may be a scanner (column 3, lines 35-41). When the option device is attached to the printer, identification information pertaining to the option device is outputted to the information processing apparatus. The printer driver is then changed in accordance with the identification information obtained from the optional device (column 10, lines 1-10). This clearly reads on terminating the print software when the detection device detects that a reader is installed.

Conclusion

- 14. All claims are rejected.
- 15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Wallerson whose telephone number is (703) 305-8581.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, DC 20231

or faxed to:

(703) 872-9314 (for formal communications intended for entry)

(for informal or draft communications, such as proposed amendments to be discussed at an interview; please label such communications "PROPOSED" or "DRAFT")

or hand-carried to:

Crystal Park Two
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PHIN.

I EDGON

Mark Wallerson